SECTION C: DESCRIPTION/SPECIFICATION/ WORK STATEMENT

1.0 NATURE OF SERVICES TO BE PERFORMED

The contractor shall provide scientific, engineering, technical, and prototype and shipalt support services; along with the necessary technical personnel, necessary facilities, and necessary support services to perform tasks on behalf of a variety of research, development and improvement programs being conducted by the Naval Surface Warfare Center, Carderock Division in the following areas:

1. perform materials and survivability analysis and testing;
2. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine material applications,
3. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine passive and active fire protection and ship survivability improvements,
4. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine personnel protection equipment and systems and stowage system design development, design modifications, and to perform upgrades and stowage modifications, on various shipboard systems including the Firefighters Breathing Apparatus, personnel life safety, and survivability
5. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine damage control equipment initiatives;
6. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine firefighting and ship survival tactics and training, including introduction and/or replacement of fire fighting and suppression agents
7. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine fire and survivability modeling and risk assessment;
8. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt in support of Naval ship and submarine environmental studies;
9. conduct specialized research, development, test, evaluation, engineering, prototype and shipalt studies in support of passive fire safety, including fire-safe composites materials, aboard Naval ship and submarines; and
10. provide training and general technical support.

The procurement and furnishing of equipment and material in support of this effort is authorized.

2.0 BACKGROUND

The Fire Protection and Sea Survival Branch (Code 643) of the Ship Materials Engineering Department (Code 64) of the Naval Surface Warfare Center, Carderock Division, participates in research, development, engineering, and improvement efforts for Commander, Naval Sea Systems command (NAVSEA, 05L) and various operational commanders such as Commander, Naval Surface Forces (Atlantic and Pacific), and Commander, Naval Submarine Forces (Atlantic and Pacific). With down sizing of many Navy facilities over the years, the Navy is committed to providing a streamlined, cost effective program to conduct RDT & E activities which lead to significant and real reductions in expenditures and to the increased operational survivability, safety and protection of naval surface ships and submarines. To execute its responsibilities, The Fire Protection and Survival Branch of the Survivability, Structures and Materials Directorate at the Carderock Division, Naval Surface Warfare Center (CDNSWC) requires support with its fire protection testing and engineering, materials engineering, personnel protection, ship survivability, environmental, and corrosion control programs for Navy ships and submarine applications.

A major objective of this program is to ensure that all efforts are conducted in a timely and cost effective manner which results in reduced cost by extending the life cycle of the affected systems. This support requires the timely and high quality engineering services to assist with on-going projects and newly assigned research and development

projects which improve ship and submarine, survivability from fire and combat damage effects. The contractor will require special background and experience in fire prevention and fire protection technology areas, materials technology, survivability and damage control management, and environmental management as well as an expertise in life safety and with personnel protection and clothing and equipment. In meeting fleet needs on a fast and responsive basis, the knowledge and ability to perform technology assessments, identify and transition new technology applications, and deliver technical products and assistance in a timely manner are required capabilities.

Specific areas of technical interest include:

- preparing specifications and standards, and developing documentation for the implementation of new technology for use by the U.S. Navy;
- conducting research and development activities relating to improved personnel protection, damage control equipment and systems;
- determining and developing facilities for special storage of flammable liquids/materials and environmentally, hazardous materials;
- conducting field trials which validate the efficacy of the developed hardware, systems and techniques;
- performing prefabrication and alteration installations of enhanced environmental and corrosion control, and personnel protection equipment on a platform, class or fleet wide basis;
- testing the installed systems, equipment and components to ensure operational integrity and training ships force in operations; and
- evaluating enhanced systems to ensure reduced cost and extended life cycle performance thereby establishing a revised engineering baseline which will result in technologically improved systems.

3.0 SCOPE OF WORK:

The contractor shall provide expert engineering and technical services, facilities, and the experienced personnel and resources to support CDNSWC in the research, development, test, evaluation, prototype and shipalt installation of and in the application of fire protection and personnel safety and protection techniques, improved materials and equipment for Navy ships and submarines, survivability enhancements, and in providing support in the installation, modification and upgrade of these equipment and systems aboard all classes of Navy ships and submarines and at-shore commands. Services will also be included in the areas of the planning, conducting and reporting of all work. These services shall require expertise based upon demonstrated experience in the required discipline areas. The contractor shall assist the Fire Protection and Survival Branch and Ship Materials Engineering Department in accordance with the specific work assignments' limited to the following task areas:

3.1 Materials Testing and Analysis

3.1.1 The contractor shall provide the engineering and technical support to execute and report test results of fire and physical properties testing of materials.

3.1.2 The contractor shall conduct assessments of new technology materials and the impact of their integration into new, backfit, and operational ships and submarines.

3.1.3 The contractor shall provide the technical support to initiate and compile materials records for program managers and material vendors.

3.1.4 The contractor shall assist in the development of new test methods for testing materials for survival in the marine and combat environment they will be subjected to during their life cycle (e.g., residual strength characteristics of note-metallic materials at elevated temperatures).

3.1.5 The contractor shall assist in the design and testing of prototypes of new fire and materials test apparatuses.

3.1.6 The contractor shall assist in the development of general and detailed material definition documents (including the update of existing documents) for materials.

3.1.7 The contractor shall provide design services and support documentation to integrate new technology material applications into fleet ships and submarines.

3.1.8 The contractor shall provide technical personnel and facilities to assist in production testing of materials.

3.1.9 The contractor shall assist in baseline studies, fire hazard and fire risk analysis, that assess the advantages and disadvantages of fire-safe composites materials for shipboard applications.

3.2 Planning and Conduct of Intermediate and Large Scale Fire Tests

3.2.1 The contractor shall prepare fire threat assessments and evaluations of new material applications for shipboard use.

3.2.2 The contractor shall assist in the development of test plans and programs to test material applications to meet the threat scenarios.

3.2.3 The contractor shall assist in conduct and data collection of intermediate and large scale fire tests of new material applications.

3.2.4 The contractor shall provide technical support to report test results and findings and prepare studies, and support documentation when necessary to support material application Program Managers incorporation of the new technology into the Navy.

3.2.5. The contractor shall provide engineering services for development, design, construction, and standardization of prototype material characterization and testing facilities at NSWCCD and other Navy facilities.

3.3 Fire and Survivability Modeling and Risk Assessment

3.3.1 The contractor shall conduct material fire hazard assessments.

3.3.2 The contractor shall develop analysis methods and procedures to evaluate fire growth in ships and submarines from the material level to the space to the compartment and to the total ship or submarine.

3.3.3 The contractor shall tailor modeling techniques to enable the evaluation of fire protection features such as material fire retardants, smoke curtains, ship design practices (cable penetrators), active and passive systems, and personnel fire fighting procedures.

3.3.4 The contractor shall tailor modeling techniques to enable the evaluation of new technology material and ship survivability features and to assess the adequacy of existing methods, practices and procedures.

3.3.5 The contractor shall provide technical support to evaluate the need for and to apply fire protection and survivability principles and materials to new ship designs and conversions to operational ships.

3.4 Damage Control Equipment Initiatives

3.4.1 The contractor shall review and evaluate technical data and operational practices to determine areas that will benefit from new damage control equipment initiatives.

3.4.2 The contractor shall identify and evaluate new technologies and available state-of-the-art materials and systems that will improve shipboard damage control methods and overall ship survivability.

3.4.3 The contractor shall assist in the conduct of feasibility studies and conceptual designs of submarines and ships down to the material system level for incorporation of new damage control, survivability and protection features.

3.4.4 The contractor shall assist in the preparation of test plans and procedures to test, validate and evaluate prototype materials and systems which may improve damage detection, damage limitation and damage recovery.

3.5 Fire Fighting and Ship Survival Tactics and Training

3.5.1 The contractor shall assist in the conduct of studies and analyses for improved fire fighting practices and survivability measures.

3.5.2 The contractor shall assist in the development of methods and procedures which incorporate new fire fighting practices, suppression agents, and usage of new technology equipment and systems into the fleet.

3.5.3 The contractor shall assist in the development of training plans, presentations and educational material to support the introduction of new fire fighting and survivability technologies.

3.6 Personnel Protection, Safety Equipment, Life Safety, Clothing, Survivability, Hardware Development, Life Cycle Management, and Maintenance Support

3.6.1 The contractor shall assist in the development of general or detailed documentation for new or modified life safety and survivability equipment.

3.6.2 The contractor shall conduct the appropriate tests, provide for shipboard installation of the following equipment and its stowage equipment, and life cycle maintenance support for the following types of fire/personnel protection and safety equipment, clothing, and hardware:

- Candidate Fire Fighter's Open-Circuit and Closed-Circuit Self-Contained Breathing Apparatuses (SCBAs);
- Candidate Emergency Escape Breathing Devices (Open or Closed Circuit) (EEBDS);
- Candidate auto-inflation (AI) devices for auto-inflatable life preservers;
- Candidate Distress Marker Lights (DML) and Personnel Marker Lights (PMLs) for life preservers;
- Candidate Inherently Buoyant, inflatable and Auto-inflatable life preservers and work vest personal floatation devices and lifeboats;
- Candidate Immediately Dangerous to Life and Health (IDLH) Supplied Air Respirator (SAR) equipment;
- Candidate Fall Arrest Equipment (including full-body, waist, and chest harnesses, lanyards, and ascent/descent roping systems);
- Candidate Photoluminescent Marker sign technology;
- Candidate firefighter's, hazardous material cleanup, and steam leak clothing and equipment; and
- Combustion gas detection instrumentation and associated protective clothing.

3.7 Fire / Personnel Protection and Damage Control Environmental Studies

3.7.1 The contractor shall perform environmental assessments to determine the impact of testing and test procedures on the environment.

3.7.2 The contractor shall prepare environmental impact studies for new or redesigned test facilities.

3.7.3 The contractor shall perform studies to determine the life-cycle environmental impact of new materials.

3.7.4 The contractor shall assist in the design of pollution prevention technologies.

3.7.5 The contractor shall perfo rm analysis and tests to determine pollution levels at test sites and other facilities.

3.7.6 The contractor shall provide technical and engineering assistance in the development of pollution remediation and site restoration technologies for test sites and other facilities.

3.8 Alteration Installation Team Support

3.8.1 The contractor shall provide the manpower, materials, facilities, portable workshops similar to existing CDNSWC CONEX boxes, and material staging centers to accomplish field service requirements.

3.8.2. The contractor shall produce machined kit parts and kit manufacturing support from design drawings and blueprints to be provided as GFI.

3.8.3 The contractor shall provide, procure, store and stage incidental material identified in the applicable alteration/modification documentation to be provided as GFI.

3.8.4 The contractor shall provide storage for Government Furnished Material (GFM) as provided for the applicable alteration/modification package.

3.8.5 The contractor shall pro vide for the transportation of material between the contractor's storage facility and government storage facilities.

3.8.6 The contractor shall maintain a current tracking system for incidental material procurement.

3.8.7 The contractor shall provide manufacturing/fabrication support in sheet metal (stainless steel and aluminum), structural steel and aluminum fabrication shipfitting and pipefitting in shop and on site, metal finishing, conversion, coating, painting, precision milling, index gear cutting, tool and die, shaping, grinding, and welding including MIG, TIG and carbon steel.

3.8.8 The contractor shall conduct alteration logistics and scheduling activities including evaluating and describing existing logistics support and recommending logistic element changes required to support the alteration.

3.8.9 The contractor shall furnish logistic support for investigations, analyses, reports and services to include a quick reaction capability in the areas of alteration documentation, equipment fabrication, assembly, distribution, staging, maintenance and installation.

3.8.10 The contractor shall analyze, develop, and recommend options or cost effective changes in logistics support.

3.8.11 The contractor shall develop alteration installation package plans and schedules.

3.8.12 The contractor shall review previously installed alteration installations for compliance with current specifications and standards (to be provided as GFI) and provide written recommendations for updates.

3.8.13 The contractor shall procure incidental material and provide for the introduction of supplemental services required for installation as approved by drawings, sketches or instructions to be provided as Government Furnished Information (GFI).

3.8.14 The contractor shall accomplish specific planning, fabricating, staging, ripout, replacement, and installation tasks according to modification/alteration specifications and procedures to be provided as GFI.

3.9 Testing and Training Support

3.9.1 The contractor shall prepare test and analysis plans and procedures.

3.9.2 The contractor shall complete and operationally test all installations including connections to all fluid and electrical utility sources, emergency shutdown devices, etc.

3.9.3 The contractor shall conduct the necessary tests and analysis including electronic data generation, physical processes and signal processing to establish functional relationships.

3.9.4 The contractor shall comply with regulations relating to shipboard and shore industrial safety and environmental control.

3.9.5 The contractor shall provide verification of certification for welders and pipefitters and ensure that certified personnel carry a copy of their certification at all times during the modification/alteration.

3.9.6 The contractor shall provide on-site technical guidance and training in the use of the installed system and provide manuals for the operation and maintenance of the system as required.

3.9.7 The contractor shall assist in the preparation of training materials (videos, booklets, etc.) instructional development and other educational materials for improved personnel protection, environmental and corrosion control initiatives.

3.9.8 The contractor shall implement a developed quality assurance program based on NSTS 9090-310A and 9090-37.1 to be provided as GFI.

3.10 Evaluation of Enhanced Systems Support

3.10.1 The contractor shall provide management system options for progress tracking, materials management, cost effectiveness analysis, performance tracking or other related management issues.

3.10.2 The contractor shall collect alteration data and analyze the results for technical, cost and schedule impact.

3.10.3 The contractor shall perform on-site validation and verification surveys of enhanced systems to ensure that systems and equipments are in compliance with operational standards.

3.10.4 The contractor shall review, evaluate, develop, input, and update alteration project life-cycle management plans.

3.10.5 The contractor shall design, fabricate, and test proposed alteration modifications by prototyping the design concept to determine its adequacy in meeting functional and producibility requirements and provide design recommendations, fabricated parts, recommended test plans, and prototype test results.

3.10.6 The contractor shall acquire the required material and fabricate the alteration equipment for the prototype to ensure that the alteration configuration and installation standards are accurate prior to full fleet installation.

3.10.7 The contractor shall develop effectiveness studies and assessments of new personnel protection, environmental, corrosion control, and fire-safe composites technologies.

3.10.8 The contractor shall conduct studies and assessments of new technology initiatives for their impact on life-cycle, total ship design, cost, and operational capability.

3.11 Environmental Technology Support

3.11.1 The contractor shall provide "state-of-the-art environmental and hazardous waste characterization techniques and hardware for use in identifying methods to dispose of the waste.

3.11.2 The contractor shall develop improved image data analysis, display, data compression, and data retrieval algorithms, analysis hardware and systems, which use approved safety procedures.

3.12 General Technical Support

3.12.1 The contractor shall conduct studies and assessments of new technology initiatives of the life cycle impact on total ship design, cost, and operational capability.

3. 12.2 The contractor shall assist in the preparation of documentation and conduct studies and analyses to facilitate the introduction of new materials and survival technologies into submarine and surface ship designs.

3. 12.3 The contractor shall provide technical support in the life-cycle management of the fire protection and survivability equipment and systems introduced into the fleet.

3. 12.4 The contractor shall provide technical support for material and survivability data bases and test methodologies.

3. 12.5 The contractor shall assist in design evaluation support through analysis and empirical assessment at the ship, system, and equipment levels.

3. 12.6 The contractor shall assist in the evaluation of new technologies to facilitate incorporation into surface ship, advanced naval vehicle, and submarine designs and engineering standards.

3. 12.7 The contractor shall assist in the development of effectiveness studies and assessments of new technology logistic and life-cycle impact on total ship design, and operational capability.

3. 12.8 The contractor shall assist in the development of test plans and programs involving ships, systems, equipment, structures, logistics, and personnel.

3. 12.9 The contractor shall assist ,in life-cycle management assessment for existing and advanced ship designs to enhance the operational survivability and damage control of the platforms. These assessments include the review of such areas as:

INSURV Assessments
Procurement Strategies
Configuration Management
Inventory Control
SECAS/FMPMIS
Provisioning Technical Documentation

3. 12.10 The contractor shall assist in the conduct of feasibility studies and conceptual designs of ships and submarines and individual systems incorporating new and reconfigured survivability, fire protection and damage control features.

3. 12.11 The contractor shall assist in the preparation, development, and introduction of survivability, fire protection, and damage control features technical documentation into the fleet (approval for service use).

3. 12.12 The contractor shall assist in the assessment of the adequacy of existing methods, practices and procedures for the installation and maintenance of survivability, fire protection and damage control features aboard ships (including the assessment of adequacy of documentation and training), documentation as specified in Section C (Statement of Work) for each task. The following general types of documentation will be required:

(a) Progress reports and analyses
(b) Test plans and procedures
(c) Viewgraphs

(d) Plan of Action and Milestones (POA&Ms)

NOTE: The Contractor shall be responsible for the acquisition of all data essential to satisfactory performance hereunder. The CDNSWC will furnish to the Contractor, upon request, any available data germane to each task.

4.0 PERSONNEL

4.1 General Requirements:

4.1.1 The personnel qualifications set forth herein are the minimum qualifications acceptable for performance under this contract. Degree or certificate requirements must be satisfied by degree/certificate from an accredited school.

4.1.2 Be a U.S. citizen.

4.1.3 Have demonstrated skills commensurate with the position.

4.2 Specific Qualifications:

4.2.1 Program Manager (Key)

Specific Experience: Shall have at least fifteen (15) years of progressively responsible experience in the area of personnel protection, with emphasis on SCBA shipalt, materials and environmental or corrosion control areas including at least 5 years experience in organizing and managing ship and craft research and development. Shall have experience in supervising all phases of the project tasks and have the ability to establish and meet project needs with regards to technical and non-technical manpower, facilities, and equipment. Shall have experience in the planning and supervision of areas addressed in Section C (Statement of Work). Should have knowledge of Navy activities and their functions.

Education: Desire a B.S. or B.A. degree in engineering or science.

4.2.2 **Program Assistant** (Key)

Specific Experience: Shall have at least ten (10) years experience in systems analysis, including systems development, integration, test and evaluation. Shall have at least five (5) years experience in supervising and directing a professional staff, military operations experience, and experience in implementing SCBA and other damage control equipment techniques in order to provide on-site guidance in areas identified in Section C (Statement of Work).

Education: Desire a B.S. or B.A. Degree in engineering, physics, math, chemistry or computer science.

4.2.3 **Project Engineer** (Key)

Specific Experience: Shall have at least fifteen (15) years of progressively responsible experience in engineering analysis in support of personnel protection and/or environmental or corrosion control and materials programs. Shall have ten (10) years experience in project management. Membership in professional organizations is desirable.

Education: Desire a B.S. Degree in Engineering.

4.2.4 **Team Leader** (Key)

Specific Experience: Shall have at least five (5) years experience in systems analysis, systems design and development, configuration, testing and evaluation in support of the Navy's survivability and personnel protection programs. In addition, should have three (3) years of experience in conducting field work associated with materials and personnel protection in marine environments.

Education: Desire a B.S. or B. A. Degree in physics, math, chemistry or computer science.

4.2.5. Quality Assurance (QA) Supervisor (Non-key)

Specific Experience: Should have at least five (5) years experience in support of the Navy's personnel protection programs, especially tasks associated with shipalts, as described in Section C (Statement of Work). Should have at least three (3) years experience in conducting field work.

Education: Desire a B.S. or B.A. Degree in Engineering or Technician's diploma.

4.2.6 Welder (Non-key)

Specific Experience:

a. Should have a minimum of ten (10) years of shipboard experience in the working, manufacturing, repairing, modifying, rebuilding, and assembling various types of metal and alloy parts, equipment, systems, and structures aboard ships.

b. Experience and qualified in welding of materials of the general types HY80/100, NiCu, L Cres, and, aluminum alloys.

c. Posses practical knowledge of welding principles and skills to meet optimum welding parameters to accomplish acceptable welds in accordance with fabrication standards of NAVSEA S9074-AR-G1B-010/278.

d. Certification in accordance Government approved welding standards of NAVSEA S9074-AQ-G1B-010/248 for the specified materials and joint positions in MIL-STD-22.

e. Performing layout from orthographic, detail, sectional, assembly and isometric drawings, specifications, and oral instructions; and ability to read and interpret structural material identification symbols/abbreviations, weld symbols, and blueprint terminology and layout.

f. Three (3) years of the last five (5) years of experience must have been involved in the work cited in Section C, as related to Fleet Modernization Program which involved working knowledge of shipboard damage control, fire protection, and personnel protection standards and conditions.

Education: Individual must have a high school diploma, GED, trade school, or industrial school; and shall have successfully completed a shipyard apprenticeship program or supplemental vocational training beyond high school in shipboard installation welding trade.

4.2.7 Shipfitter (Non-key)

Specific Experience:

a. Should have a minimum of ten (10) years of shipboard experience in the modification, fabrication, repair, assembly, and installation of various metal structural parts of ships.

b. Possess practical knowledge of shipfitting equipment, structures and metals; laying out, cutting, and shaping metals parts; and, positioning, alignment, and securing of parts and subassemblies.

c. Should possess the ability to perform a layout from orthographic, detail, sectional, assembly and isometric rements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identifieand blueprint terminology and layout.

d. Three (3) years of the last five (5) years of experience must have been involved in the work cited in Section C, as related to Fleet Modernization Program which involved working knowledge of shipboard damage control, fire protection, and personnel protection standards and conditions.

Education: Should have a high school diploma, GED, trade school, or industrial school; and successful completion of a shipyard apprenticeship program or supplemental vocational training beyond high school in shipboard installation ship fitter trade.

4.2.8 Pipefitter

Specific Experience:

a. Should have a minimum of ten (10) years of shipboard experience in the installation, maintenance, and repair of high energy piping systems onboard ships.

b. Possess practical knowledge of pipefitting equipment, sizes and schedules; applying elementary mathematic and physics principles; planning and laying out work; and fabricating and installing flat plate, pipe and special fitting (i.e. Lok-Ring) aboard ships.

c. Possess knowledge of brazing and welding. Certification to braze Grade III, IV and IV filler material in all joint positions is preferred.

d. Performing layout from orthographic, detail, sectional, assembly and isometric drawings, specifications, and oral instructions; and ability to read and interpret structural material identification symbols/abbreviations, weld symbols, and blueprint terminology and layout.

e. Three (3) years of the last five (5) years of experience must have been involved in the work cited in Section C, as related to Fleet Modernization Program which involved working knowledge of shipboard damage control, fire protection, and personnel protection standards and conditions.

Education: Shall have a high school diploma, GED, trade school, or industrial school; and successful completion of a shipyard apprenticeship program or supplemental vocational training beyond high school in shipboard installation pipe fitter trade.

4.2.9 Electrician

Experience:

a. Should have a minimum of ten (10) years of shipboard experience in the installation, maintenance, troubleshooting, and repair of electrical wiring systems and associated fixtures, controls, alarms, and equipment aboard ships.

b. Possess practical knowledge of electrical equipment, and fixtures; planning and laying out the routing, placement, and arrangement of marine electrical of similarly complex systems, circuits, controls and equipment; and, troubleshooting and testing new and existing lines, circuits, systems and fixtures; that may require th use of difficult test instruments and complex circuit diagrams.

c. Perform layout from blueprints, wiring diagrams, engineering drawings and sketches, electrical maintenance, repair manuals, and oral instructions; and ability to interpret complex circuit diagrams for internal and external connections of complicated electrical equipment such as controllers, circuit breakers, transformers and alarms on multiphase circuits.

d. Familiary with shipboard safety requirements and tagout programs.

e. Three (3) years of the last five (5) years of experience must have been involved in the work cited in Section C, as related to Fleet Modernization Program which involved working knowledge of shipboard damage control, fire protection, and personnel protection standards and conditions.

Education: Should have a high school diploma, GED, trade school, or industrial school; and successful completion of a shipyard apprenticeship program or supplemental vocational training beyond high school in shipboard installation electrician trade.

4.2.10 Driver

Specific Experience:

Should have a minimum of two (2) years of experience in transporting materials, merchandise, and equipment between various types of establishments such as freight depots, warehouses and ships.

Education: Should have a high school diploma, GED, trade school, or industrial school; and must have a valid, current Commercial Drivers License (CDL).

4.2.11 Purchase Agent

Specific Experience:

a. Should have a minimum of two (2) years of practical experience in responsible material procurement duties.

b. Possess practical knowledge of approved materials for use in shipboard damage control, fire protection and personnel protection systems and equipment.

c. Working knowledge of material procurement specifications.

d. Demonstrated knowledge of procedures for procurement of materials via the Navy Supply System.

Education: Should have a high school, GED, trade school, or industrial school diploma.

4.2.12 Integrated Logistics Support (ILS)Technician

Specific Experience: Should have at least three (3) years experience in support of the Navy's survivability or personnel protection programs. Shall have at least three (3) years experience in the development, testing or alteration of components, equipment or systems.

Education: Shall have a high school diploma, GED, trade school, or industrial school; and successful completion of a shipyard apprenticeship program or supplemental vocational training beyond high school in a shipboard installation trade.

4.2.13 Admin/typist

Specific Experience: Should have at least five (5) years word processing experience.

Education: No minimum education requirements required.

4.3 QUALITY SYSTEM PROVISIONS:

AIT Responsibilities. The AIT shall provide and maintain a Quality System in accordance with NAVSEA 9090-310C (Appendix D). Upon request by the cognizant NSA, AITs will be required to show proof that their Quality System has been accepted by NAVSEA 04XQ or a SUPSHIP office. Additionally, all other contractually related procedures requiring acceptance shall be available to the NSA prior to the start of ship work when requested.

5.0 MATERIALS

The materials and services to be furnished under this contract shall be only those kinds and quantities of materials and services specified in the Delivery Order and/or required to perform a particular task. The contractor shall be reimbursed for the actual material costs as determined and approved by the cognizant Defense Contract Audit Agency.

6.0 DELIVERABLES OR PERFORMANCE

Place and time of delivery of data shall be as specified on the DD 1423 (Contract Data Requirements List) that will be submitted with individual delivery orders. The following types of data shall be delivered:

6.1. Program Progress Report; Monthly Progress Reports (CDRL Item A0001)

The Contractor shall provide two (2) copies of a monthly management report of activities conducted under this contract to the Contracting Officer's Representative (COR). The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) and the associated DID for each task. These reports shall indicate the status of each open delivery order, the services provided, and problems encountered and resolutions. A final summary report is due at completion of the contract.

6.2 Funds and Man-hour Expenditure Report (CDRL Item A0002)

The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) and the associated DID for each task. The contractor shall provide two (2) copies of the funds and man-hour expenditure report for costs accrued under this contract to the COR. These reports shall indicate the cost accrued by the Contractor for each month and cumulatively by CLIN, and also by delivery order.

6.3 Status Report; Monthly Progress Report (CDRL Item A0003)
The contractor shall provide two (2) copies (1 copy to the COR, 1 copy to the TPOC) of a monthly progress report for work performed on all delivery orders. The contractor shall provide a progress report for each individual delivery order including a breakdown of cost by task within the delivery order. For all delivery orders requiring ship installations, cost breakdowns should identify the class of ship, ship name and hull number along with a breakdown of man-hours, and labor, material, and travel costs.

6.4 Status Report; Team Leader Meetings (CDRL Item A0004)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) and the associated DID for each task. The contractor shall provide two (2) copies of a Status Report for all SCBA Team Leader Meetings. The document will address all information discussed and decisions made for all SCBA related activities.

6.5 Status Report; Alteration/Repair Logistics Report (CDRL Item A0005)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) and the associated DID for each task. Logistics support shall consist of providing hardware installation, configuration management and training support for equipment and systems installed. The contractor shall provide two (2) copies of Alteration/Repair Logistics Reports for all SCBA hardware installations, changes in ship configurations, or when training is required. The reports shall be prepared in accordance with AIT Instruction 9090.310C, Appendix C: messages and reports.

6.6 Material Status Report; Material Procurement Report (CDRL Item A0006)
The contractor shall provide two (2) copies of all Material Status Reports as required by each delivery order SOW. In addition to the information required in the Data Item Description (DID), the contractor shall provide an index of all purchase orders and copies of all purchase orders for materials purchased by the contractor that are required to complete the work under the delivery order SOW.

6.7 Inspection and Test Plan; Inspection System Plan (CDRL Item A0007)

The contractor shall provide two (2) copies of inspection and test plans as required by the delivery order SOW. This CDRL will be required for all SCBA related work, and may be required for other delivery orders involving damage control related work where testing/training is required.

6.8 Test Procedure (CDRL Item A0008)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) and the associated DID for each task. The contractor shall provide two (2) copies of test procedures (step-by-step testing operation) for all SCBA related work, and may be required under other delivery orders where developmental, qualification, or acceptance testing is required.

6.9 Certification Data Reports; Test and Inspection Reports (CDRL Item A0009)
The contractor shall provide two (2) copies of certification data reports for all SCBA related work. The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and the associated DID.

6.10 Product Drawings and Associated Lists; Drawings (CDRL Item A0010)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and the associated DID. The contractor shall provide two (2) copies of each set of drawings for all SCBA related work and other damage control related work when required by the delivery order statement of work.

6.11 Scientific and Technical Reports; Engineering and Technical Information (CDRL Item A0011)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and the associated DID. Reports may be required for all tasks where RDT&E is performed, as well as delivery orders requiring engineering tasks. General documentation that may be required are progress and analyses, and plans and procedures.

6.12 Presentation Materials (CDRL Item A0012)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and in accordance with the associated DID. Presentation materials shall include a text of any accompanying verbal material.

6.13 Training Materials (CDRL Item A0013)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and in accordance with the associated DID. Training materials will be required in efforts where the contractor is required to provide training to government personnel on specific engineering tasks, i.e., SCBA installations.

6.14 Status of Government Furnished Equipment (GFE) Report (CDRL Item A0014)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and in accordance with the associated DID. This CDRL item is required when any delivery order requires GFE to be provided to the contractor.

6.15 Status Report; Selected Configuration Records Matrix (CDRL A0015)
The deliverable items for the proposed effort will be in the form of appropriate documentation as specified in Section C (Statement of Work) for each task and in accordance with the associated DID. Selected Configuration Records Matrix shall consist of providing quantity and location data for all “APL-worthy” assets. This data item is invoked when an installation requires hardware to be installed, ship configuration is changed, or training is required.

NOTE: The Contractor shall be responsible for the acquisition of all data essential for satisfactory performance hereunder. The NSWC,CD will furnish to the Contractor, upon request, any available data germane to each task.

7.0 PLACE OF DELIVERY

Destinations for any items to be delivered shall be specified in the orders under this contract and in accordance with the DD Form 1423 (CDRL) applicable to each delivery order placed.

8.0 TIME OF DELIVERY

The time of delivery shall be specified on each Delivery Order issued under this contract, unless delivery is deferred at the Government's option by written order of the Contracting Officer.

9.0 CONTRACT PERIOD OF PERFORMANCE

The period of performance of the contract, for the purpose of issuing Delivery Orders hereunder, is from time of contract award to 5 years. (Contract expiration, date will be 5 years and 6 months from the date of contract award).

10.0 PLACE OF PERFORMANCE

It is anticipated that the major effort to be performed hereunder will be accomplished at the Contractor's facility, staging areas, aboard US Navy vessels in various ports around the world, and other Navy facilities.

11.0 TECHNICAL CONFERENCES

Contractor personnel shall be available for informational meetings with technical personnel at NSWC,CD to discuss the direction, progress, and/or problems that occur during the performance of each delivery order placed.

12.0 TRAVEL REQUIREMENTS

The contractor will be required to make visits from time to time in the performance of various tasks assigned under this contract. Such visits will-be to various Naval activities and to other contractors associated with reduced maintenance and fire/personnel protection equipment life cycle and safety projects (e.g., Norfolk, VA; San Diego, CA; Pascagoula, MI; and other places as appropriate).

13.0 GOVERNMENT FURNISHED INFORMATION (GFI)

Government Furnished Information shall be furnished by the Government to allow successful completion of the tasks as outlined in this contract and will be specified in the Delivery Orders placed against the contract. Examples of such information include: Alteration Installation Kit drawings and blueprints, Alteration Installation sketches, Alteration Installation specifications and standards, and Technical Manuals and Reports.

14.0 GOVERNMENT FURNISHED MATERIAL (GFM)

Materials shall be furnished by the Government to allow successful completion of the tasks outlined in this contract will be specified in the Delivery Orders placed against the contract. Examples of such materials include: Alteration installation incidental materials, Alteration Installation materials for Firefighter's Breathing Apparatus (FFBA) stowages, etc.

15.0 DESIGNATION OF CONTRACTING OFFICER REPRESENTATIVE (COR)

The Contracting Officer hereby designates the following person as Contracting Officer's Technical Representative (COR) for this contract: Mr. Usman Sorathia, Code 643.

16.0 SECURITY REQUIREMENTS

It is contemplated that all work to be performed under this contract will be UNCLASSIFIED.